

Mr. Dion Nusbaum
Frederick Tool
P.O. Box 783
Goshen, Indiana 46526

Re: Registered Construction and Operation Status,
039-12849-00300

Dear Mr. Nusbaum:

The application from Frederick Tool, received on October 12, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following **a** metal fabrication operation, to be located at 214 West Jefferson, Goshen, Indiana, is classified as registered:

- (a) One (1) natural gas-fired space heater designated as I, with a maximum heat input capacity of 0.250 mmBtu/hr and exhausts to one (1) stack designated as I.
- (b) One (1) natural gas-fired space heater designated as H, with a maximum heat input capacity of 0.333 mmBtu/hr and exhausts to one (1) stack designated as H.
- (c) Two (2) natural gas-fired space heaters designated as G and E, with a maximum heat input capacity of 0.250 mmBtu/hr per unit, heater designated as G exhaust to one (1) stack designated as G and heat er designated as E exhausts to one (1) stack designated as E.
- (d) One (1) natural gas-fired space heater designated as F, with a maximum heat input capacity of 0.250 mmBtu/hr and exhausts to one (1) designated as F.
- (e) One (1) natural gas-fired furnace designated as D, with a maximum heat input capacity of 0.125 mmBtu/hr and exhausts to one (1) stack designated as D.
- (f) One (1) natural gas-fired dry-off oven designated as B, with a maximum heat input capacity of 0.500 mmBtu/hr and exhausts to one (1) stack designated as B.
- (g) One (1) natural gas-fired curing oven designated as A. with a maximum heat input capacity of 1.2 mmBtu/hr and exhausts to one (1) stack designated as A.
- (h) One (1) self contained powder paint booth controlled by a filter system, coating table legs at a maximum rate of 1,000 units per day, hardware for wheel barrels of 2,000 units per day and hand trucks of 350 units per day.
- (i) One (1) dust collector which controls emissions from the abrasive grinding belts.
- (j) Abrasive grinding belts used occasionally for grinding masonry tools.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
2. Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the powder paint booth shall be limited by the following:
- Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:
- $$E = 4.10 P^{0.67}$$
- where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
- The filter system shall be in operation at all times the powder paint booth is in operation, in order to comply with this limit.
3. Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the Abrasive Grinding Belts shall not exceed 0.551 pounds per hour per unit, based on a maximum process weight of less than 100 pounds per hour per unit.

This registration is a renewal issued to this source pursuant 326 IAC 2-5.5-2. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

NLJ

cc: File - Elkhart County
Elkhart County Health Department
Air Compliance - Paul Karkiewicz
Northern Regional Office
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Frederick Tool
Address:	214 West Jefferson
City:	Goshen
Authorized individual:	Dion Nusbaum
Phone #:	219-533-2309
Registration #:	039-12849-00300

I hereby certify that Frederick Tool is still in operation and is in compliance with the requirements of Registration **039-12849-00300**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Frederick Tool
Source Location: 214 West Jefferson, Goshen Indiana 46526
County: Elkhart
SIC Code: 3428
Operation Permit No.: 039-12849-00300
Permit Reviewer: Nysa L. James

The Office of Air Management (OAM) has reviewed an application from Frederick Tool relating to the operation of a metal fabrication operation.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) natural gas-fired space heater designated as I, with a maximum heat input capacity of 0.250 mmBtu/hr and exhausts to one (1) stack designated as I.
- (b) One (1) natural gas-fired space heater designated as H, with a maximum heat input capacity of 0.333 mmBtu/hr and exhausts to one (1) stack designated as H.
- (c) Two (2) natural gas-fired space heaters designated as G and E, with a maximum heat input capacity of 0.250 mmBtu/hr per unit, heater designated as G exhaust to one (1) stack designated as G and heat er designated as E exhausts to one (1) stack designated as E.
- (d) One (1) natural gas-fired space heater designated as F, with a maximum heat input capacity of 0.250 mmBtu/hr and exhausts to one (1) designated as F.
- (e) One (1) natural gas-fired furnace designated as D, with a maximum heat input capacity of 0.125 mmBtu/hr and exhausts to one (1) stack designated as D.
- (f) One (1) natural gas-fired dry-off oven designated as B, with a maximum heat input capacity of 0.500 mmBtu/hr and exhausts to one (1) stack designated as B.
- (g) One (1) natural gas-fired curing oven designated as A. with a maximum heat input capacity of 1.2 mmBtu/hr and exhausts to one (1) stack designated as A.
- (h) One (1) self contained powder paint booth controlled by a filter system, coating table legs at a maximum rate of 1,000 units per day, hardware for wheel barrels of 2,000 units per day and hand trucks of 350 units per day.
- (i) One (1) dust collector which controls emissions from the abrasive grinding belts.

- (j) Abrasive grinding belts used occasionally for grinding masonry tools.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) R039-4289-00300, issued on March 9, 1995.

All conditions from previous approvals were incorporated into this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)
A	curing oven	29	1.0
B	dry off oven	17	1.0
D	forced air furnace	19	0.5
E	space heater	34	0.67
F	space heater	16	0.67
G	space heater	34	0.67
H	space heater	24	1.0
I	space heater	24	0.67

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on October 12, 2000.

Emission Calculations

There have been no changes made at the source since Registration 039-4289-00300 was issued on March 9, 1995. Therefore the potential to emit calculated in the original registration is still valid and accepted in this registration.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	5.5
PM-10	5.5
SO ₂	0.01
VOC	0.1

CO	0.3
NO _x	1.4
HAP's	Potential To Emit (tons/year)
TOTAL	0.00

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM₁₀ are equal to or greater than 5 tons per year but less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for PM₁₀, SO₂ and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.29
PM10	0.29
SO ₂	0.01
VOC	0.1
CO	0.3
NO _x	1.4

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting):

This source is located in Elkhart County and the potential to emit VOC and NO_x is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations):

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Powder Paint Booth

326 IAC 6-3-2 (Process Operations):

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the powder paint booth shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The filter system shall be in operation at all times the powder paint booth is in operation, in order to comply with this limit.

No 326 IAC 8 rules apply because there are no VOC emissions from the powder paint booth.

State Rule Applicability - Abrasive Grinding Belts

326 IAC 6-3-2 (Process Operations):

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the Abrasive Grinding Belts shall not exceed 0.551 pounds per hour per unit, based on a maximum process weight of less than 100 pounds per hour per unit.

Conclusion

The operation of this metal fabrication operation shall be subject to the conditions of the attached **Registration 039-12849-00300**.